

STATE OF IOWA  
DEPARTMENT OF COMMERCE  
UTILITIES BOARD

IN RE:  IES UTILITIES INC. AND INTERSTATE POWER COMPANY, n/k/a INTERSTATE POWER AND LIGHT COMPANY	DOCKET NOS. TF-03-180 TF-03-181 (WRU-03-30-150)
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**ORDER REGARDING COMPLIANCE TARIFFS**

(Issued July 22, 2004)

On June 5, 2003, Interstate Power and Light Company (IPL) filed with the Utilities Board (Board) proposed tariffs, identified as TF-03-180 and TF-03-181. The two tariffs change the terms under which IPL offers net metering to customers with alternate energy production facilities. The Board approved the proposed tariffs, with modifications, on January 20, 2004. On January 29, 2004, the Board denied as untimely an intervention petition filed by the Iowa Renewable Energy Association (I-Renew), but allowed I-Renew to participate in the proceeding for the limited purpose of reviewing IPL's compliance tariff. IPL filed revised tariff sheets in compliance with the Board's order on February 18 and 26, 2004. The Board issued an order approving the compliance tariffs on March 4, 2004.

On March 18, 2004, I-Renew and the Consumer Advocate Division of the Department of Justice (Consumer Advocate) filed a motion to reopen the record for purposes of taking additional evidence. I-Renew filed a statement of position on the

same date and Consumer Advocate filed a response on April 7, 2004. Wind Utility Consulting (Wind Utility) filed a petition joining in the motion on April 1, 2004.

The Board granted the motion to reopen the record to consider additional statements of position regarding the compliance tariffs because the Board inadvertently entered its order approving the compliance tariffs prior to the expiration of the 20-day objection period provided for by 199 IAC 7.5(1). I-Renew, Wind Utility, Consumer Advocate, and IPL filed additional statements of position and responses. MidAmerican Energy Company (MidAmerican) filed a statement supporting IPL's comments, and was granted intervenor status in the event this proceeding evolved into something more than a review of compliance tariffs.

Having granted the motion to reopen the record with respect to compliance tariffs, the Board will consider the additional statements filed in its review of IPL's compliance filing. I-Renew argues that IPL's compliance tariff does not comply with the modifications ordered by the Board on January 20, 2004, because it does not clearly explain how the 500 kW net metering limit would be implemented. IPL's net metering tariff states "[c]ustomers may contract for a portion of their facilities up to 500 kW as net metered," but does not explain how this would be done. I-Renew claims that it is not clear whether IPL's tariff would: (1) require the facility's total energy outflow to be prorated for net metering (i.e., by a ratio of 500 kW to the facility's total nameplate capacity) or (2) allow use of the facility's total energy outflow

for net metering, except for energy produced in excess of a 500 kW power output (i.e., allowing more of the facility's energy outflow to be used for net metering).

I-Renew supports the second approach, allowing the facility's total energy outflow to be used for net metering, except that portion produced in excess of a 500 kW power output. I-Renew argues that this more closely reflects the actual power provided from the alternate energy production (AEP) facility up to 500 kW and allows intermittent generation sources, such as wind energy, to be treated the same as steady generation sources of similar size, such as biomass. This second approach would require special metering to measure both the kWh energy outflow and associated kW power output of the AEP facility in order to identify when and how much kWh energy is produced in excess of a 500 kW power output. I-Renew states the AEP facility could bear the cost of this special metering. Consumer Advocate supports I-Renew's preferred second approach, allowing the facility's total energy outflow to be used for net metering, except that portion produced in excess of a 500 kW power output, provided it is made available to net metering customers as an option.

Wind Utility also supports I-Renew's position for limiting net metering in terms of power output rather than capacity. Alternatively, if the limit is defined in terms of capacity rather than power output, Wind Utility believes the same end result can be achieved by adding software that caps a larger generator's maximum power output at

500 kW, resulting in an effective “artificially limited” nameplate capacity level of 500 kW that fully qualifies for net metering.

IPL argues that the attempt by I-Renew, Wind Utility, and Consumer Advocate to re-define the 500 kW limit raises a new issue which is outside the scope of IPL’s compliance filing. IPL believes the Board’s January 20, 2004, order clearly specified the 500 kW limit in terms of nameplate capacity. The order changed IPL’s earlier proposed limit, which referred to facilities with nameplate capacities of 500 kW or less, to a more abstract limit based on total capacity of 500 kW without reference to specific facilities. This interpretation is also consistent with MidAmerican’s approved tariff, referenced in the Board’s order, which allows a facility “with a design capacity of over 500 kW” to net meter “up to 500 kW of design capacity of the facility, and may request [a standard purchase contract] for the undesignated balance of the facility’s capacity.” Design capacity is the same as nameplate capacity. Therefore, IPL argues that the 500 kW limit in its compliance filing is consistent with the Board’s order and the referenced definition in MidAmerican’s net metering tariff.

IPL argues that I-Renew’s comparison of wind generation with a biomass facility is inappropriate. The consistent generation of a biomass facility provides more value than intermittent wind generation. IPL also believes that a biomass facility would receive little benefit from net metering. Net metering primarily benefits those whose intermittent generation is not well matched to their usage patterns.

While I-Renew advocates a 500 kW limit in terms of a facility's power output rather than its capacity, the Board's January 20, 2004, order clearly described the limit in terms of capacity:

[T]he net metering limit would apply to the first 500 kW of a customer's total facility capacity. This would allow facilities larger than 500 kW to qualify for net metering for part of their capacity.

Interstate Power and Light Company, Docket Nos. TF-03-180, TF-03-181, WRU-03-30-150 (WRU-99-38-150, WRU-99-39-151), "Order Approving Tariffs with Modification and Granting Waiver," January 20, 2004, p. 4. The Board's order also required the following tariff modifications to implement the 500 kW capacity limit:

a. The 500 kW net metering limit is to be applied to AEP capacity rather than facilities, allowing customers to contract a portion of their facilities, up to 500 kW, as net metered AEP facilities;

b. All net metering customers are to be offered the functional equivalent of non-time differentiated, single-meter net metering for all AEP facilities, including any payment for net excess generation on a non-time differentiated basis.

Id., Order, p. 8.

I-Renew's interpretation is contrary to Board-ordered modification "a" which, again, clearly describes the 500 kW limit in terms of capacity rather than power output. Modification "a" even describes splitting out a portion of the facilities as "separate net metered AEP facilities." I-Renew's power limit interpretation is also contrary to Board-ordered modification "b," since I-Renew's approach would require

the use of time-differentiated metering to identify the excess kWh produced at times when the facility's power output exceeds 500 kW.

Therefore, since the 500 kW limit applies to facility capacity rather than power output and must be based on non-time differentiated metering, the Board believes the most reasonable interpretation for implementing the 500 kW limit is the "prorated" approach described by I-Renew. This involves prorating the facility's energy outflows based on a ratio of 500 kW to the facility's total nameplate capacity, which is why one of IPL's tariff modifications allows for the use of dual metering that separately records the facility's energy inflows and outflows (at IPL's expense). Without such a dual metering arrangement, it would be impossible to separately identify the facility's prorated share of energy flows available for net metering.

However, I-Renew is correct in its assertion that IPL's tariff is not as clear as it could be in describing how the 500 kW net metering capacity limit will be prorated for facilities larger than 500 kW. Therefore, for purposes of clarity and avoiding future misunderstandings, IPL will be required to amend its net metering compliance tariff to provide a clear explanation of how the 500 kW net metering capacity limit would be prorated for facilities larger than 500 kW. This modification is to include an explanation of how the facility's separately recorded kWh outflow will be divided into a "net metering" portion, based on a ratio of 500 kW to the facility's total nameplate capacity and a remaining "purchase" portion. It is also to clearly explain how the prorated "net metering" portion will be netted against the facility's separately recorded

kWh inflow, with the remaining “purchase” portion sold to IPL as a standard AEP purchase.

Defining the net metering limit in terms of capacity rather than power output addresses any attempt, as suggested by Wind Utility, to redefine a facility’s capacity by artificially limiting its power output. Any such device would not alter the facility’s maximum generating capability or nameplate capacity.

In supporting I-Renew’s position, Consumer Advocate refers to prior Board orders that used average capacity based on kWh production for determining utility compliance with the mandatory AEP purchase obligations in Iowa Code §§ 476.41 to 476.45. However, those decisions did not affect net metering, but only applied to the net amount of kWh delivered to the utility for purchase. In addition, the rules cited in support of those decisions have been repealed.

After reviewing the additional comments, the Board finds that the following changes to IPL’s current compliance tariff would be acceptable to the Board. Other language that reaches the same result would also be acceptable. However, any changes different than those contained below would be subject to further Board review.

## II. Rates for Sales to Customer and for Purchase by Company:

The energy KWH inflow (received by AEP facilities) and energy KWH outflow (received by Company) are each measured on a monthly basis. All energy inflow to the AEP facility shall be billed according to the rate schedule applicable for the pricing zone for which the AEP facility

qualifies. The rate for capacity and energy to be purchased (energy outflow ~~inflow~~) by the Company may be negotiated between Company and AEP facility or may be determined per section A below. Customers with facilities that have an aggregate nameplate capacity below 500 KW may select the net metering option. Customers with nameplate capacity over 500 KW may contract for a portion of their facilities up to 500 KW as net metered. Net metering options are described in section B below.

A. AEP Facilities over 500 KW

For facilities with total nameplate capacity greater than 500 KW, all energy inflows to the facility shall be billed at the applicable rate for which they qualify. All energy outflows from the customer into the Company's electric system shall be purchased by the Company at prices negotiated between the Company and the AEP facility not to exceed the Company's avoided cost. Customers may contract for a portion of their facilities up to 500 KW as net metered. Net metering options are described in section B below.

B. Net Metering

Existing AEP facilities (500 KW or less) may select net metering below or may continue to operate under the terms of an existing agreement.

Net Metering for AEP Facilities

Available to AEP capacity of 500 KW or less receiving electric service with metered energy only. The energy KWH inflow (received by AEP facilities) and energy KWH outflow (received by Company) shall be measured by a single meter in which only the net amount of electricity is monitored on a monthly basis. At its discretion, the company may install metering capable of recording total energy inflow and total energy outflow separately, at no additional cost to the AEP facility. Metered energy billed shall be the total energy inflow less the total energy outflow for the same period and same location. Any outflow KWH balances shall be carried forward to the next billing month.



The net energy inflow shall be billed according to the Residential, Farm or General Service rate schedule for the applicable pricing zone after subtracting any carryover outflow balance from the current monthly net inflow. The energy outflows from one meter shall not cover inflows on another meter nor shall it be converted to cash. Any energy outflow balance after the AEP facilities terminate service shall become property of Company.

If a customer's aggregate AEP nameplate capacity at a location exceeds 500 KW, the Company shall install a meter capable of recording the customer's total energy inflow and total energy outflow separately, at no additional cost to the customer. The customer's total energy outflow shall be divided into separate "net metering" and "purchase" portions. The "net metering" portion shall be a prorated amount, calculated by applying the total energy outflow to a ratio of: 500 KW to the aggregate AEP nameplate capacity at the location. The remaining energy outflow shall be the "purchase" portion. Metered energy billed to the customer shall be the total energy inflow less the "net metering" portion of total energy outflow for the same period and same location. Any "net metering" outflow kWh balances shall be carried forward to the next billing month. The "purchase" portion of total energy outflow shall be purchased by the Company as described in section A above.

A customer's monthly bill shall include applicable monthly service (basic service) charges and any excess facilities charges. The customer will not incur any additional charges for metering beyond the charges for metering provided in the basic service charge.

**IT IS THEREFORE ORDERED:**

1. The Board, after reviewing the additional comments submitted by the parties, hereby clarifies its order approving compliance tariffs as discussed in this order. Among other things, the 500 kW net metering limit is defined in terms of capacity rather than power output and IPL is required to implement this on a non-

time-differentiated basis, as clarified in the suggested changes to the compliance tariffs contained in the body of this order.

2. Interstate Power and Light Company shall revise its compliance tariffs consistent with this order within 20 days of the date of this order.

**UTILITIES BOARD**

/s/ Diane Munns

/s/ Mark O. Lambert

ATTEST:

/s/ Judi K. Cooper  
Executive Secretary

/s/ Elliott Smith

Dated at Des Moines, Iowa, this 22<sup>nd</sup> day of July, 2004.